National Resource Center
FOR PATIENT/FAMILY-CENTERED MEDICAL HOME

Identification and Screening of Social Determinants of Health among Children with Special Health Care Needs in Medicaid

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Social determinants of health and children and youth with special health care needs

- Social determinants of health (SDOH) can impact health outcomes for children, particularly children and youth with special health care needs (CYSHCN).
- State Medicaid agencies are working to incorporate SDOH screenings into their programs to improve health outcomes and reduce costs, providing an important opportunity for collaboration and partnerships among state Title V CYSHCN programs, pediatricians, and others working to address SDOH.
- SDOH screening tools are used to identify Medicaid beneficiaries who require higher social needs to help inform their care coordination and connect them to resources.
- State Medicaid agencies' SDOH screening strategies include the use of Medicaid administrative claims data to identify the social needs of certain populations or from pre-existing SDOH questionnaires, many of which are typically administered within 90 days of beneficiary enrollment, and again annually.
- State Medicaid agencies and managed care organizations (MCOs) are partnering with state Title V CYSHCN programs to share information about enrollees' SDOHs to improve care coordination across programs.

Introduction

Social determinants of health (SDOH) are social and economic factors, such as housing stability, neighborhood safety, income level, and access to healthy nutrition,[1] that can significantly affect a wide range of physical and mental health outcomes.[2] Research estimates that SDOH contribute to 40 percent of population health outcomes, compared to access to and quality of health care, which only contributes to 20 percent of health outcomes.[3] Children and youth with special health care needs (CYSHCN) often have higher social needs than non-CYSHCN. According to parental surveys, CYSHCN are more likely than non-CYSHCN to experience multiple adverse childhood experiences,[4] often live in low-income households,[5] and live in unsafe neighborhoods.[6] As a result of these higher social needs, CYSHCN may require attention to non-clinical, social necessities, such as high-quality education and stable housing, as part of their health care.

As state Medicaid programs transform their delivery systems to improve health and control costs, they have increasingly focused on the role that social determinants play in the health of their enrollees.[7] **States are using a range of strategies to address social determinants in Medicaid programs, such as linking beneficiaries to community resources, using value-based payment models to incentivize physician and non-physician clinicians to focus on SDOH, and funding additional services such as housing-related supports.**[8] Given the increased social needs of CYSHCN, state Medicaid agencies are making concerted efforts to incorporate SDOH screening this population of children.[9,10]

In many cases, **states are implementing efforts to identify and screen enrollees for social needs as part of health care delivery reform.** Social identification and screening for social needs can help link enrollees with community resources, supportive services such as care coordination, and data to target additional supports and state initiatives. While screening for Medicaid beneficiaries for SDOH can be challenging, some states are using existing state administrative data sources to gather SDOH information, rather than screen individuals through patient-level data collection.[11] **Massachusetts, for example, created a Neighborhood Stress Index that determines the degree to which individuals' environment affects their own health outcomes, and incorporated the index into MassHealth's risk adjusted payment model.**[12] These screening and administrative data initiatives can be valuable components of an overall SDOH strategy by helping identify enrollees at high social risk, and as a first step to linking enrollees to needed social services.[13]

The relationship between SDOH and CYSHCN

The Center for Medicare & Medicaid Services (CMS) has categorized SDOH into five distinct categories: housing instability, food insecurity, transportation problems, utility help needs, and interpersonal violence.[14] While it is important to consider these factors for the general population, it is of particular importance for CYSHCN. As the number of their medical complexities increase, so does their required medical and social care needs, which are often unmet.[15] One-third of families of CYSHCN report having difficulty obtaining nonmedical services, resulting in higher rates of unemployment by the children's parents and unmet care needs for the children and their families.[16]

The relationship between SDOH and children's special health care needs is complex and cyclical. Social determinants can affect a child's physical and mental health, which in turn, can influence their environment, and therefore influence their SDOH. For example, children experiencing poverty have significantly worse parent-reported health status than children not experiencing poverty, and are significantly more likely to experience asthma attacks,[17] and are at increased risk of mental illness.[18] Food insecurity is associated with worse health and an increased risk of hospitalization,[19] as well as iron-deficiency anemia.[20] Children who experience homelessness have higher rates of chronic conditions, emergency department visits, and health care spending in early childhood, compared to other infants with similar income who are not experiencing homelessness.[21]

The presence of special health care needs can also lead to increased health-related social needs. In the United States, the significant financial hardship faced by families of CYSHCN is well-documented. This financial hardship typically occurs in three ways:[22]

- **Higher health care costs**[23] Even among families with health insurance, insurance often does not fully cover all needed care for CYSHCN. Almost one-third of families of CYSHCN report that their current insurance is inadequate.[24]
- **Higher costs of daily living**[25] For example, families may use additional gas to get to medical appointments or spend more on air conditioning if the child's condition causes reduced tolerance to heat.
- **Less employment income**[26] A significant number (15 percent) of families of CYSHCN report that a family member has needed to cut back hours or stop working due to a child's health.[27]

Due to these increased costs and reduced income, families of CYSHCN have less to spend on other essentials like food and shelter, potentially making screening for SDOH even more critical. Unmet social needs are extremely prevalent among CYSHCN. For example, a screening program in a complex care clinic identified that more than half of families reported indicators of housing instability, and one-third of families had skipped meals because they lacked money to purchase food.[28]

Pediatricians and other medical professionals are increasingly recognizing the value of considering SDOH. The American Academy of Pediatrics *Bright Futures* guidelines now recommend discussion of social determinants of health risks, strengths, and protective factors at most childhood health surveillance visits.[29] This trend to systematically include SDOH screening in care coordination is also noted on the state-level, with various state Medicaid programs incorporating SDOH into their care coordination models.

Screening for SDOH can be an important step in connecting children with needed social services to improve the health of CYSHCN or in some cases, preventing the development of special health care needs altogether. The following case studies from North Carolina, Kansas, and Oregon describe how these states have used screenings and administrative data to identify and assess SDOH in order to better support CYSHCN.

North Carolina: Developing a Standardized Approach to Screening for SDOH in Medicaid

North Carolina is implementing Medicaid managed care for most beneficiaries, with rollout beginning in 2020.[30] **The state incorporated SDOH as a core component of their Medicaid transformation.** Participating prepaid health plans (PHPs) will be required to administer a standardized health-related social needs screening to most Medicaid enrollees, as part of an overall care needs assessment. PHPs can determine their own questions for other aspects of the screening (such as questions about the enrollee's medical needs), but they are required to use the standardized social needs questions. The state's standardized social needs screening questions include four core domains: food, housing/utilities, transportation, and interpersonal safety.

In developing the health-related social needs screening, **North Carolina officials standardized the screening questions across participating Medicaid PHPs.** Standardized questions permit statewide data collection and comparisons across PHPs, which can help inform state policymaking and programming. Additionally, **standardization helps ensure that the SDOH screenings are validated, linked to outcomes, aligned with available community resources, and written at an accessible reading level.**[31] To develop the screening questions, North Carolina started by compiling previously written screening tools, such as Bright Futures Questionnaire, PRAPARE (Community Health Centers), Accountable Health Community, and the Pregnancy Medical Home Screen. The state then conducted a literature review, solicited stakeholder input, and convened a Technical Advisory Group. The Technical Advisory Group included a wide range of stakeholders, including but not limited to researchers, physicians, and representatives from state and local agencies, medical practices, hospitals, health plans, and community organizations.[32] After deciding on a set of questions with input from the Technical Advisory Group, North Carolina released the questions for public comment and conducted field testing across 18 clinical settings. The results were compiled into a field test report.

PHPs will be required to:

- Screen all enrollees within 90 days of enrollment, and re-screen all beneficiaries that are not engaged in ongoing care management at least annually.[33]
- Within seven days of screening or assignment to a primary care pediatrician, they must send results to the enrollee's medical home/primary care pediatrician.
- If applicable, they must send results to the Care Coordination for Children program (which will be referred to as "Care Management for At-Risk Children" after the launch of managed care in 2020), which serves CYSHCN in early childhood and administered by a partnership that includes the state Medicaid agency and the state Title V CYSHCN program.[34]

- Incorporate the SDOH screening results into the methods they use to identify which enrollees are in need of care management services.[35]
- Through care management, connect enrollees with community-based resources, as well as provide in-person assistance with applications for several assistance programs. The state is developing a centralized electronic resource platform, called NCCARE360, that PHPs will use to identify and connect members with the community-based resources, and to track referrals to ensure that members are receiving the services they need.[36]

Kansas: Requiring Medicaid Managed Care Organizations to Screen for SDOH

The **Kansas** Department of Health and Environment, which administers the state Medicaid program, included a focus on SDOH as part of new contracts with Medicaid managed care organizations (MMC). Effective January 2019, the new MMC program includes a focus on SDOH and "social determinants of independence," which is defined by the state as "individuals' goals that help them achieve sustainable improvements and advancement in their lives."[37]

Medicaid MCOs in Kansas are required to administer a health screening by phone or in person to all enrollees within 90 days of enrollment. The health screening must be re-administered at least annually by phone, using claims data, or through the enrollee's PCP.[38] The state has standardized health screening questions across the MCOs, including several questions on SDOH, such as stable housing and need for food assistance.[39] Certain responses on the health screening, including elevated social needs, trigger an in-person health risk assessment by MCO staff. The health risk assessment includes additional questions about family needs in areas including childcare, education, and financial stress.[40]

MCOs are expected to use the results of the screening and risk assessment to determine appropriate levels of service coordination, create and implement a service plan, and link enrollees to community resources. The health plans are also required to provide service coordination for certain high-risk groups, including individuals with chronic and/or complex conditions, youth with intensive behavioral health needs, youth in foster care, and individuals receiving home- and community-based services. They must also take into account SDOH and independence needs in determining who receives service coordination.[41] **Finally, for CYSHCN who receive care coordination services through the state Title V CYSHCN program, Medicaid MCOs work in partnership with the Title V program to develop a shared client report to maximize service effectiveness and efficiency.[42]**

Oregon: Using Administrative Data to Identify Children with SDOH Needs

The **Oregon** Health Plan, the state's Medicaid program, identifies children with social complexity using existing administrative data. The state assesses 12 indicators of children's social complexity that are associated with worse health care outcomes or increased cost, using administrative data from Medicaid and other state agencies. The indicators are:

- Parent or child poverty
- Parental death
- Parental incarceration
- Parent or child receipt of mental health services
- Parent or child receipt of substance use disorder services
- Child abuse and neglect
- Receipt of foster care services
- Potential language barrier
- Parental disability [43]

These indicators were drawn from a list of 18 social factors identified by the Center of Excellence on Quality of Care Measures for Children with Complex Needs as being associated with worse health care outcomes or increased costs. Statewide data in Oregon indicates that 39 percent of children enrolled in Medicaid have experienced three or more of these factors, showing the significant burden of social complexity. There are also significant disparities by race and by county.[44]

Additionally, the Oregon Medicaid program assesses children's medical complexity using Medicaid claims data to determine whether children have a complex chronic condition, a non-complex chronic condition, or are considered healthy. Medical and social factors are combined and stratified into nine categories of overall "health complexity," to identify groups of children with similar levels of medical and social complexity across the population.[45] **The state Medicaid program shares information annually about the level of health complexity of these children with the state's Coordinated Care Organizations (CCOs). The state and CCOs then use the data to engage community-level partners, to develop care coordination models for children with different levels of health complexity, and to support physicians, care coordinators, and others involved in patient care.** The state is also exploring use of this data in pay-for-performance and other delivery system reform efforts.[46]

Conclusion

As exemplified by the work of North Carolina, Kansas, and Oregon, states are using SDOH screening and administrative data to support CYSHCN in a number of ways at both the individual and population level. SDOH information can help link families to needed community-based services, prioritize care coordination services for children with the most complex health and social needs, assist care coordinators in care planning and identifying relevant care management goals, and inform clinical decision making.[47] Additionally, some states are using SDOH information to assist in quality improvement and program evaluation efforts, provide data for surveillance and monitoring activities, help plan and target future state initiatives, and support Medicaid payment reform efforts.[48,49]

Notes

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